

### **REMARKS**

The claims have been amended by this Amendment A to more clearly define the invention. Claims 1-58 of the application are presented for further examination. Reconsideration of the application in light of the amendments to the claims and the following remarks is respectfully requested.

#### **Claim Rejections Under 35 U.S.C. § 103(a)**

Claims 1-28 and 30-57 stand rejected under §103(a) as being unpatentable over Mollenkopf (US 6,965,302) in view of Nilssen (US 5,999,094). Applicant respectfully disagrees and submits that the invention is not obvious from the combined, cited references.

In particular, the Examiner points to the transformer bypass device (BD) 100 of Mollenkopf as corresponding to the conductive member. However, amended independent claims 1, 23, 29, 30, 52 and 58 recite that the elongated conductive member of the coupling device having a **length of at least 6" which is positioned in parallel** with the elongated conductor of the electrical power delivery system. Mollenkopf fails to recognize that the BP 100 may be parallel elongated conductors, as recited by the claims, and discloses instead that the BD 100 is a transformer. In addition, claims 20 and 49 include similar recitals.

In addition, claims 1 and 30 have been amended to specify "an insulator positioned between the elongated conductive member and the elongated conductor along the length of the elongated conductive member such that the insulator separates the elongated conductor and the elongated conductive member along the length of the elongated conductive member and such that the elongated conductive member is capacitively coupled along its length to the elongated conductor...." Claims 20, 23, 29, 49, 52 and 58 have been similarly amended. Mollenkopf fails to recognize an **insulator** within the coupling to separate the conductors along the length of the elongated conductive member in order to provide **capacitive coupling** along the length of the elongated conductor. Particularly, claims 19, 29, 48 and 58 specifically recite that the coupling does not employ a magnetic core.

Mollenkopf mentions generally capacitive coupling (see, for example, column 9, lines 10-14) and refers to U.S. application Ser. No. 10/176,500, entitled "Power Line Coupling Device and Method of Using the Same" (see column 14, lines 34-40), now U.S. Patent No. 7,102,478, which has been identified in an IDS filed with this amendment. However, Mollenkopf does not

disclose amended claims 1, 23, 30 and 52 and instead suggests coupling via a transformer and an rf choke (see Fig. 12 of 7,102,478).

As noted above, independent claims 20, 23, 29, 49, 52 and 58 have been similarly amended and are patentable over the combined references for at least the same reasons as claims 1 and 30. For example, the language recites the parallel relationship and the capacitive coupling separated by an insulator. Furthermore, claims 20, 29, 49 and 59 recite that the capacitive coupling along the length is greater than 5 pF/cm. The Examiner argues that:

to the neutral conductor extending from the transformer (col. 8, lines 51-65). Since Mollenkopf discloses a pair of conductive wires that are twisted to form the coupling unit for transmitting data along a powerline, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide a conductive member that is greater than 5 pF/cm, 10pF/cm, 15 pF/cm, or any other length in order to maintain an impedance of the twisted pair of conductors equal to an impedance of the twisted pair of conductors.

Applicant disagrees and requests that the Examiner cite a reference to support obviousness or withdraw the rejection. In particular, the Examiner seems to suggest that impedance matching is always obvious. Applicant recites impedance matching within the context of capacitive coupling between an elongated conductor and an elongated conductive member when coupling a signal onto an electrical power delivery system. Applicant submits that such impedance matching within the recited context is not obvious.

Applicant further submits that the dependent claims are separately patentable. For example, the references cited do not disclose a cable or medium in the form of an elongated conductor parallel to an elongated conductive member as recited by claims 2-6 and 31-35. Similarly, the neutral wire, grounding wire and phase conductors of claims 7-9 and 36-38 are not taught within the context of the invention. In addition, it is noted that the parallel configurations as recited by claims 10-17 and 39-46 are not obvious because the references do not disclose a parallel orientation so that the particular parallel configurations are not obvious.

With regard to claims 18 and 47, the resistor of Mollenkopf is not in series with a capacitively coupled elongated conductive member as recited by the claims; instead, Mollenkopf shows a resistor in series with the ground.

Finally, with regard to claims 19 and 48 noted above, which the Examiner rejected but did not address, these claims exclude a magnetic core as taught by Mollenkopf, which instead discloses transformers with a magnetic core. Thus, it is not understood why these claims have been rejected. Applicant requests that the Examiner point to a disclosure in the references that suggests capacitive coupling without a magnetic core or withdraw the rejection of claims 19 and 48, and with regard to claims 29 and 58, which have been similarly amended.

In summary, both Mollenkopf and Nilssen fail to recognize a coupling device with a elongated conductor in parallel with an elongated conductive member separated by an insulator to provide capacitive coupling along the length of the conductive member. Thus, Applicant submits that claims 1-58 are patentable over the references.

#### **Claim Rejections Under 35 U.S.C. § 102(e)**

Claims 29 and 58 stand rejected under §102(e) as being anticipated by Mollenkopf. Claims 29 and 58 have been amended as noted above and are patentable over Mollenkopf for the reasons noted above.

In view of the foregoing, Applicant submits that independent claims 1, 20, 23, 29, 30, 49, 52 and 58 are allowable over the cited art. Claims 2-19, 21, 22, 24-28, 31-48, 50, 51 and 53-57 depend from independent claims 1, 20, 23, 29, 30, 49, 52 and 58 and are believed to be allowable for at least the same reasons as the independent claims from which they depend, as well as for the reasons noted above.

It is felt that a full and complete response has been made to the Office Action, and Applicant respectfully submits that pending claims 1-58 are allowable over the cited art and that the subject application is now in condition for allowance. The fact that Applicant may not have specifically traversed any particular assertion by the Examiner should not be construed as indicating Applicant's agreement therewith.

**Applicant wishes to expedite prosecution of this application. If the Examiner deems the application to not be in condition for allowance, the Examiner is invited and encouraged to telephone the undersigned to discuss making an Examiner's amendment to place the application in condition for allowance.**

Submitted herewith is the requisite extension of time fee in the amount of \$120. The Commissioner is hereby authorized to charge any underpayment and credit any overpayment of government fees to Deposit Account No. 19-1345.

Respectfully submitted,

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